

REMARKS

As a preliminary matter, Applicants note for the record the substance of a telephone interview conducted between the above-identified Examiner and Applicants' representative, Josh C. Snider, on July 17, 2006. The Examiner was not willing to discuss the substance of the claims or the cited prior art in the interview. Therefore, no agreement was reached at this time regarding the patentability of the claims.

Agreement was reached, however, that the outstanding Office Action is deficient on its face for relying on at least one prior art reference ("Song") that has not been anywhere made of record on an Information Disclosure Statement ("IDS"). The Examiner indicated his belief that a "Song" reference was cited in an earlier July 10, 2003 Office Action, but this earlier Song reference has a different number ("US5796449") than what is mentioned on page 4 ("US5532853") of the outstanding Office Action. Applicants' representative pointed out to the Examiner that this earlier reference does not appear on any IDS in this case either. Accordingly, the Examiner agreed to vacate the outstanding Office Action, and reissue a corrected Office Action that either cites only references made of record, or includes an IDS listing any new references on which the Examiner intends to rely, or has considered. Accordingly, the status of this case is again non-final, and prosecution is still open, until the mailing date of a correct Office Action.

As a second preliminary matter, and assuming the Examiner intends to repeat the issue in a new Office Action, Applicants traverse any finality of the January 11, 2006 Restriction Requirement, and repeat the unanswered February 13, 2006 traversal of this Requirement. In the traversal, Applicants provided meritorious arguments for how there would be no serious burden

placed upon the Examiner to examine all of the pending claims of the present Application. The Examiner's response to these arguments (as appearing in the vacated Office Action) was nothing more than a mere denial. The response did not assert any evidence or facts that an examination of only 6 (of the original 42) claims would require different searches for each of the alleged species identified by the Examiner. A serious burden is not established by merely stating its existence. The Examiner is required to demonstrate how a *prima facie* case of a serious burden will be imposed.

For example, with respect to the identified species A and B, the Examiner is apparently asserting that the existence of one versus two conducting films renders the species patentably distinct from one another. The Examiner also appears to assert that having one conducting film contact inner walls and surfaces of the contact holes, or having the contact holes reach a surface of the substrate also render the species patentably distinct from other claims that do not recite all of these limitations. Although the Examiner has correctly identified different language and limitations between the claims, the Examiner has still not demonstrated exactly what are the differences between the claims that render the species so patentably distinct from one another that the Examiner cannot examine all of these claims together.

The Examiner should be required to state on the record exactly what features of one species render that species patentably distinct from the others. This issue is significant in the present case because of the Examiner's proposed combination of various prior art references in the Section 103 rejection (discussed below), where the various art references are all drawn toward different structures that not appear to read upon only one of the alleged species. If the Examiner wishes to

maintain this Restriction Requirement, the Examiner should thus withdraw at least the obviousness rejection below.

As a third preliminary matter, in an effort to expedite prosecution, Applicants assume that the Examiner intends to repeat much of the substantive rejections that appeared in the vacated Office Action. Applicants will therefore attempt to address the potential repeat of these issues, to the best of their ability, as follows in order to narrow the issues remaining in this case.

The vacated Office Action indicates that claim 42 may stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner asserts that the present Specification does not sufficiently describe the recited fourth conductive film of claim 42 that allows the connection of the first and the second contact holes through the pixel electrode. This rejection would therefore be improper because the Specification fully supports claim 42. The Examiner appears to be adding limitations to claim 42 that are not recited or otherwise required by the teachings of the present Specification.

For example, the Examiner appears to be limiting the “fourth conductive film” recited in claim 42 to a structure having only a single, unitary, and continuous shape. Neither claim 42 though, nor the Specification, require such limitations. Page 37, lines 23-26 of the present Specification, describes a single laser CVD film formed to fill the repairing contact holes (step C). Steps D through G (page 37, line 27 through page 38, line 20) further describe though, how the laser CVD film can be formed according to several different structural examples. The film can be a continuous structure, which directly connects the contact holes (as also recited in claim 41), or it can be a discontinuous structure (example F) that connects the contact holes through a pixel electrode.

Further examples are also described in the Specification. All of these examples though, relate back to step C, which describes the formation of “a” laser CVD film. It is not new matter to collectively refer to the various *portions* of the film together within the context of the “fourth conductive film.”

One skilled in the art should clearly understand this distinction within the context of the claims themselves. For example, independent claim 40 recites that the separate elements of the gate electrode and gate bus line are made of the recited first conductive film. The first conductive film is also recited in the singular, yet still includes the separate individual components of the gate electrode and the gate bus line. Similarly, claim 40 also recites the second conductive film in the singular, even though the claim further recites that the separate elements of the source electrode, drain electrode, and drain bus line are all made of this second conductive film. The present Specification therefore fully supports the recited fourth conductive film, whether or not the fourth conductive film can be a single continuous structure, or may form several distinct and separate components, similar to the recited first and second conductive films. Accordingly, any such Section 112 rejection of claim 42 will be improper.

The vacated Office Action also indicates that claims 40-42 may stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fujikawa et al. (U.S. 5,995,178) in view of Nakayoshi et al. (U.S. 6,310,667), “Song et al. (U.S. 5,532,853),” and Imura et al. (U.S. 6,239,856). As discussed above, the “Song” reference is not of record in the present case, and the case history is very confusing as to what “Song” reference the Examiner may have even meant to reference. Even if this problem is corrected in a new Office Action, a rejection still would not be established because no affirmative teaching or suggestion has been cited to combine the references as proposed.

Section 2143.01 of the MPEP requires that, for an obviousness rejection based upon a proposed combination of references, the Examiner is required to cite on the record to where the prior art teaches or suggests, not only that the references *can be* combined, but also that they should be combined, and particularly as proposed. In the present case, however, the Examiner's comments in the vacated Office Action indicate that this requirement has not been met. As also indicated above, the Examiner was not willing to discuss this substantive deficiency in the July 17, 2006 telephone interview.

The comments in the vacated Action cite only Nakayoshi only for teaching that it would be obvious to perform a disconnection inspection before repairing the disconnection, and only Imura for the mere teaching that it was known in the art to repair disconnected wirings on a substrate by the laser CVD method. The main substance of the Examiner's remarks though, was based on the Examiner's proposed combination of the subject matter of Fujikawa with the subject matter from one of the "Song" references. The rationale stated on page 7 of the vacated Action does not explain how Fujikawa and Song can actually be combined or, more particularly, where there is any teaching or suggestion for the desirability of actually making such a combination.

The Examiner correctly acknowledged that Fujikawa does not teach or suggest to form contact holes that reach the surface of the substrate. The contact holes 29b, as cited from Fujikawa, merely contact the surface of the disconnected bus line 15 (or 17), and do not go through any portion of the bus line or otherwise substantially remove any of its material structure. At least one of the potential Song references, on the other hand, forms its contact holes *through* portions of the disconnected wiring itself, thereby removing part of the wiring material, and then melting a

conductive layer (201) into the hole formed from the removed portion of the wiring. The Examiner has provided no explanation for how these two very different methods even can be combined.

Furthermore, even if the Examiner were able to state a rationale for *how* Fujikawa and one of the potential Song references could be combined, a *prima facie* case of obviousness still would not be established according to the requirements of Section 2143.01. The mere fact that references can be combined, or even that it is within the skill of one in the art to do so, is not sufficient to establish obviousness. The Examiner instead has the affirmative burden to identify where in the references themselves is taught or suggested the actual desirability of making the proposed combination. In the present case, the Examiner would have the burden to indicate where the desirability of combining each and every one of the cited references is taught or suggested. Without such objective evidence placed on the record, a rejection of independent claim 40 on grounds similar to those in the vacated Action will be deficient on its face.

With respect to dependent claims 41 and 42, the rejection of these claims would also be deficient because the vacated Action does not appear to have considered the specific limitations recited in these claims. The vacated rejection, for example, does not indicate how or where any of the references teach four conductive films, where the contact holes are directly connected to each other by the fourth conductive film (claim 41), or where the contact holes are connected to each other through the pixel electrode by the fourth conductive film (claim 42). The Examiner appears to assert that these features are shown in Figs. 4-5 of Fujikawa only, but the Examiner does not identify exactly which portions of Fujikawa he deems analogous to these limitations of the claims. None of

the drawings cited from Fujikawa, for example, illustrate any connection of the two contact holes through the pixel electrode.

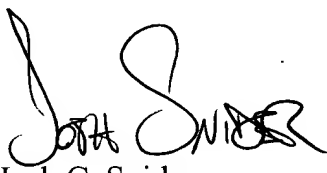
Nevertheless, in the interests of expediting prosecution, and while prosecution is still open in the present case, Applicants have further amended independent claim 40 herein to clarify that the contact holes that reach the surface of the substrate are formed on either side of the disconnected wiring. The Examiner indicates that one of the “Song” references may require a hole be made *through* the disconnected wiring and not on either opposing side of it.

Claim 40 is further amended herein to clarify that at least the upper surface of the disconnected wiring is exposed within the contact hole. A hole made through a disconnected wiring, all the way to the substrate, can never expose the upper surface of the disconnected wiring within the hole, because such an upper surface is always entirely removed by the process of going through it. As discussed above, these amendments to claim 40 may be immediately entered as a supplemental amendment, and not as an amendment after a final rejection, because the final rejection has been vacated, and only the previous non-final rejection is outstanding until the Examiner mails a new Office Action on the merits. Because the amendments made herein are filed before the mailing date of such a new Office Action, prosecution is still open, and the amendments must be entered as a matter of right.

For all of the foregoing reasons, Applicants submit that this Application, including claims 1-5 and 39-42, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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